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REMARKS

The description has been amended to overcome minor informalities. The claims have been amended to overcome formal objections and further patentability distinguished the invention. Such amendments to claims are only for the purpose of expediting the prosecution of this application and are not to be construed as an abandonment of any of the novel concepts disclosed therein.

- 1. The paragraph with continuation date has been amended as suggested. The paragraph starting on line 24 of page 6 has been amended to correct minor informalities.
- 2, 3. Claims 1-20 stand rejected under 35 U.S.C.§112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Objections were made to the claims based on insufficient antecedent basis. These claims have been amended to set forth appropriate antecedent basis for limitations in the claims. Accordingly, withdrawal of the rejections of claims 1-21 under 35 U.S.C§112, second paragraph, is respectfully requested.
 - 4,5. Claims 1-21 stand rejected under 35 U.S.C.§102(e) as anticipated by Karagosian. The office action states:

Regarding claims 1-21, Karagosian discloses claimed invention of a method for processing multi-channel audio signals or method for decoding an encoded multi-channel audio signal or an apparatus for processing multi-channel audio signals as recited. Descriptions of Figures 1-3, 6 in columns indicated the decoder 200 has three base modes of operation: surround-dominant mode, centerdominant mode and left-right mode (i.e., read on the first and second normalization mode as claimed). Controller 204 steers the operating mode of decoder 200 using N and P control signals. When the P control signal is at or near its maximum positive value and the N control signal is at or near zero, then decoder 200 operates in surround-dominant mode. When the P control signal is at or near zero and the N control signal is at or near its maximum negative value, then decoder 200 operates in center-dominant mode. When both the P and N control signals have values at or near zero, then decoder 200 operates in left-right mode. Thus, decoder 200 operates in (i) surround-dominant mode when controller 204 determines that the input audio signals have a maximum positive correlation (i.e., the signals are in phase), (ii) in center-dominant mode when controller 204 determines that the input audio signals have a maximum negative correlation (i.e., the signals are out of phase) and in (iii) left-right mode when the audio input Applicant: J. Richard Aylward et al.

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channels are uncorrelated or have a relative phase shift of 90 degree (determining a degree of correlation of different channel signals).

Decoder 200 additionally operates in combination modes that combine any of the three base modes to varying degrees when controller 204 determines either a positive or negative correlation but which is not maximum. In this case, both the P and N control signals have a non-zero voltage but are not at their maximum or minimum values. For example, if controller 204 determines that the encoded input channels are positively correlated, but not to a maximum extent, then the decoder 200 will operate in a combined surround-dominant and left-right mode (i.e., determination of partial correlation of 2 signals as in claims 10-14).

The decoder 200 of the present invention generates a facsimile of the encoded L, R, C, and S channels on each output terminal 207a-207d (output channels L', R', C', and S', respectively). Each output signal is a weighted summation of the left and right input channels as received from input terminals 201a, 201b and selectively attenuated versions of the left and right input channels received from expanders 205a-d. The weights (linearly weight or gain control applied to the different channel signals) used by each signal combiner 206a-d are selected to optimize decoder performance in each of the surround-dominant, center-dominant and left-right operating modes. Selection of the weights for each of the signal combiners 206a-d is discussed below.

Referring now to compressors 202a, 202b shown in FIG. 2, compressors 202a, 202b are each preferably coupled to respective input terminals 201a, 201b via high pass filters (not shown). Compressors 202a, 202b normalize the amplitude of the encoded audio signals on the left and right input channels. The resulting output is a normalized (constant amplitude) version of the respective signals. The normalized outputs of compressors 202a, 202b are coupled to controller 204. By normalizing the amplitude of the left and right signals, the controller 204 is not affected by amplitude variations in the encoded input signals. Pp.4-6.

This ground of rejection is respectfully traversed.

"Anticipation under §102 requires 'the presence in a single prior art disclosure of all elements of a claimed invention arranged as in that claim." Sandt Tech., Ltd. v. Resco Metal & Plastics Corp., 264 F. 3d 1344, 1350 (Fed. Cir. 2001).

"It is well settled that anticipation under 35 U.S.C. 102 requires the presence in a single reference of all of the elements of a claimed invention." Ex parte Chopra, 229 U.S.P.Q. 230, 231 (BPA&I 1985) and cases cited.

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"Anticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim." Connell v. Sears, Roebuck & Co., 220 U.S.P.Q. 193, 198 (Fed. Cir. 1983).

"This court has repeatedly stated that the defense of lack of novelty (i.e., 'anticipation') can only be established by a single prior art reference which discloses each and every element of the claimed invention." Structural Rubber Prod. Co. v. Park Rubber Co., 223 U.S.P.Q. 1264, 1270 (Fed. Cir. 1984), citing five prior Federal Circuit decisions since 1983 including Connell.

In a later analogous case the Court of Appeals for the Federal Circuit again applied this rule in reversing a denial of a motion for judgment n.o.v. after a jury finding that claims were anticipated. Jamesbury Corp. v. Litton Industrial Prod., Inc., 225 U.S.P.Q. 253 (Fed. Cir. 1985).

After quoting from Connell, "Anticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim," 225 U.S.P.Q. at 256, the court observed that the patentee accomplished a constant tight contact in a ball valve by a lip on the seal or ring which interferes with the placement of the ball. The lip protruded into the area where the ball will be placed and was thus deflected after the ball was assembled into the valve. Because of this constant pressure, the patented valve was described as providing a particularly good seal when regulating a low pressure stream. The court quoted with approval from a 1967 Court of Claims decision adopting the opinion of then Commissioner and later Judge Donald E. Lane:

[T]he term "engaging the ball" recited in claims 7 and 8 means that the lip contacts the ball with sufficient force to provide a fluid tight seal. *** The Saunders flange or lip only sealingly engages the ball 1 on the upstream side when the fluid pressure forces the lip against the ball and never sealingly engages the ball on the downstream side because there is no fluid pressure there to force the lip against the ball. The Saunders sealing ring provides a compression type of seal which depends upon the ball pressing into the material of the ring. *** The seal of Saunders depends primarily on the contact between the ball and the body of the sealing ring, and the flange or lip sealingly contacts the ball on the upstream side when the fluid pressure increases. 225 U.S.P.Q. at 258.

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Relying on Jamesbury, the ITC said, "Anticipation requires looking at a reference, and comparing the disclosure of the reference with the claims of the patent in suit. A claimed device is anticipated if a single prior art reference discloses all the elements of the claimed invention as arranged in the claim." In re Certain Floppy Disk Drives and Components Thereof, 227 U.S.P.Q. 982, 985 (U.S. ITC 1985).

Claim 1 and the claims dependent thereon recite inter alia, "determining a degree of correlation between two of the plurality of channels, the degree of correlation being related to a waveform similarity between the two of the plurality of channels. Claim 10 and the claims dependent thereon recite inter alia, "determining a degree of correlation between two of the plurality of channels, the degree of correlation being related to a waveform similarity between the two of the plurality of the channel." Claim 15 and the claims dependent thereon recite, inter alia, "determining a degree of correlation between a first channel and a second channel in the plurality of channels, the degree of correlation being related to a waveform similarity between the first channel and the second channel." Claim 21 recites inter alia, "an input characteristics determiner for determining a degree of correlation between two of the plurality of channels, the degree of correlation being related to a waveform similarity between the two of the plurality of channels."

The reference does not disclose the quoted limitations in these claims.

Instead the reference discloses:

Decoder 200 advantageously decodes the encoded audio signals (L_{τ} and R_{r}) by amplitude normalizing the audio signals and by then generating matrix steering control signals responsive to the relative phase differences of the normalized signals. The steering control signals are coupled to a variable matrix and adjust the weights (multiplier coefficients) used by the variable matrix. Column 4, lines 16-22.

Thus, decoder 200 operates in (i) surround-dominant mode when controller 204 determines that he input audio signals have a maximum positive correlation (i.e., the signals are in phase), (ii) in center-dominant mode when controller 204 determines that the input audio signals have a maximum negative correlation (i.e., the signals are out of phase) and in (iii) left-right mode when the audio input channels are uncorrelated or have a relative phase shift of 90°. Column 5, lines 29-37.

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Thus, unlike the invention disclosed and claimed in this application, which calls for determining a degree of correlation by reference to the similarity of waveforms, the reference discloses being responsive to the relative phase of the signals as a measure of their correlation.

Accordingly, withdrawal of the rejection of claims 1-21 as anticipated by the reference is respectfully requested. Should this ground of rejection be repeated, the Examiner is respectfully requested to quote verbatim the language in the reference regarded as corresponding to the limitations in the rejected claims quoted above.

6. The courtesy of the Examiner in conducting a diligent search is acknowledged with appreciation. The references cited, but not applied, are submitted to be incapable of anticipating, suggesting, or making obvious the subject matter as a whole of the invention disclosed and claimed in this application.

In view of the forgoing authorities, remarks, and the inability of the prior art, alone or in combination, to anticipate, suggest or make obvious the subject matter as a whole of the invention disclosed and claimed in this application, all the claims are submitted to be in a condition for allowance, and notice thereof is respectfully requested. Should the Examiner believes the application is not in a condition for allowance, he is respectfully requested to telephone the undersigned attorney at 617-521-7014 to discuss what additional steps he believes are necessary to place the application in a condition for allowance.

Respectfully submitted, FISH & RICHARDSON P.C.

Date:	FEB = 3 2005	
Date:		

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